

Understanding Digital Era through Entrepreneurship Readiness Level



Iston Dwija Utama, Dian Kurnianingrum, Ivan Diriyana, Mulyani

Abstract: *There are several factor that influence students to become an entrepreneur such as motivation, resource capabilities, opportunity discovery, and entrepreneurial skills. The aim of these research is to identify the entrepreneurship readiness level of student at millennial generation in West Java, Indonesia, then help them to develop their skills and knowledge to compete in digital era. By using quantitative approach with simple random sampling method we get number of sample are 370 college students in West Java, Indonesia. Result of these research showed that that students motivation, entrepreneurship skills, and resources capabilities are the most influencing factors to the level of entrepreneurship readiness level with coefficients score 0.4 $p < 0.005$; 0.26 $p < 0.005$; and 0.17 $p < 0.005$. Other variable, opportunity discovery is not significant with score 0.12, $p > 0.005$. Based on these research, students already realized about the importance of highly motivate and develop the entrepreneurial skills if they want to become an entrepreneur. The implication of these research, for formal, informal institution, government, and private sector have to develop the basic foundation, concept, and knowledge about critical thinking of how to generating an ideas and discover opportunity in entrepreneurship process for their students.*

Keywords : *Digital era, Entrepreneur readiness, Quantitative method, West Java.*

I. INTRODUCTION

Nowadays, entrepreneurship very popular topic in Indonesia, many youngster interested becoming an entrepreneur. Ratio entrepreneurs in Indonesia at 2018 based on Ministry of Technology Research and Higher Education Indonesia report is 3.1% compare to 1.6% in 2017. Indonesia also have huge number of startups companies, in 2018 there are 1,981 startup companies, compare to others countries such as Australia – 1,304; Malaysia – 221, and Vietnam – 105 (startupranking.com).

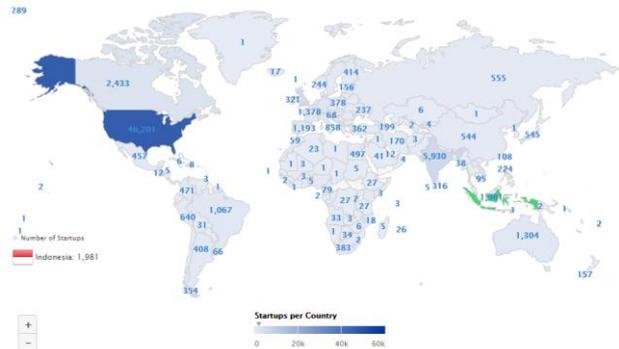


Fig 1. Number of startup companies in the world (Source: startupranking.com)

However, despite high level interest of entrepreneurship among young and teenager in Indonesia, there are concern about their entrepreneurial skill and readiness. There are many factor that influence people become a good and tough entrepreneur, study resulted that variables such as motivation, opportunity identification, resources capacity, and training have a significant impact to develop student’s entrepreneurial skills [1]. Another study that propose the conceptual framework to measure the entrepreneurship readiness level for individual profiles that separated the variables into three categories which are sociological, psychological, and managerial-entrepreneurial resulted that variables which are include in all categorical given in these study provides a solid and scientific-based development of a valid instrument for measuring readiness for entrepreneurship [2].

Based on these situation and condition, the aim of these study to identify the entrepreneurship readiness level of college student in West Java, furthermore, based on these study, we can give suggestion which variables that needs to be focused and considered in term of entrepreneurship development.

II. LITERATURE REVIEW

A. Entrepreneurship Definition

Many definition about entrepreneur has been stated, entrepreneurs is a process from innovation and produce new venture through four dimension, which are individual, organization, environment, and process that assist with network relations in government sector, education sector, and institutional sector [3]. Entrepreneurs is a process which an individual pursue an opportunity without regard to resources that they currently control for the purpose to exploiting the future goods and services in society [4].

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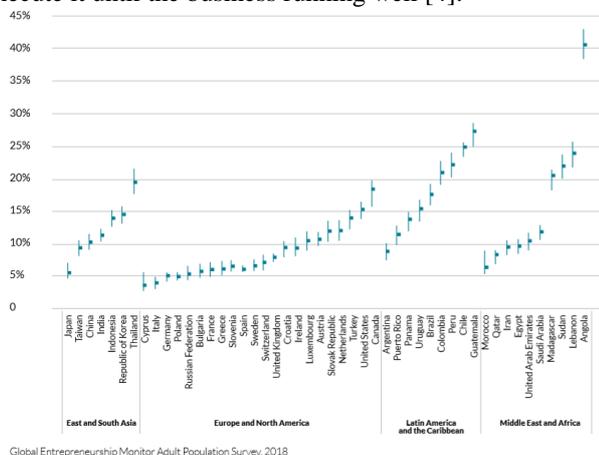
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Based on Global Entrepreneurship Monitor (GEM) Report 2018/2019, Angola Country has the highest Total early-stage Entrepreneurship Activity (TEA) rates with 41%, followed by Guatemala Country with 27%, and Chile Country with 25%. In East and South Asia region, the highest TEA rates belongs to Thailand Country with 20%, then Republic of Korea with 15%, then Indonesia in 14% [5]. Detail about Total early-stage Entrepreneurship Activity 2018/2019 given in figure 2.

Several reason people decide to become an entrepreneur rather than work in a company, 1) Be their own boss, 2) Pursue their own business idea, 3) Pursue financial freedom. Moreover, based on their study founded that there are four characteristic of successful entrepreneurs, 1) Having strong passion on business and entrepreneurship, 2) Focus to the customer or product that they create, 3) Dare to failed in business and try it again, 4) Ability to execute every intelligence opportunity, start from business idea, then execute it until the business running well [4].



Global Entrepreneurship Monitor Adult Population Survey, 2018

Fig 2. Total early-stage entrepreneurial activity (TEA) rates (Source: GEM 2018/2019)

An entrepreneurs must have a bold passion, effort, and perseverance in managing and running their business. There are key success components formulation for a startup that have been study with the qualitative research approach. These theory take entrepreneurs as a social process, furthermore, others variables such as personality and environment have strong roles for people who decide become an entrepreneurs. Furthermore, these study also conclude that there are four key source of elements that determines a successful and sustainability of business which are 1) Opportunity identification, 2) Motivation and determination, 3) Resources capacity, and 4) Entrepreneurial skills [6]. According to the previous study, similar study by using the same variables and adding entrepreneurship training as a moderator variable to measure the readiness of entrepreneurship for college student as a sample of research, result showed that these four variables have significant effect in term of creating new startup business, moreover, training program also have important role for them to pursue seriously the development of their startup business [1].

Entrepreneurship readiness define as the confluence of a set of personal traits (or features) that distinguishes individuals with readiness for as entrepreneurship especially competent to observe and analyze their environment. Entrepreneurship readiness also can be determined by the

factors of a wide set of sociological, psychological, and business management. Sociological factor can determined by measure these variables: 1) Gender, 2) Age, 3) Habitat, 4) Education level, 5) Income level, 6) Entrepreneurial antecedents, and 7) Work-status. Psychological factor can be determined by measure an entrepreneur's profile that represent into their personality traits such as locus control, self-efficacy, propensity to take risks, and proactivity. Last, business management factors can be related to the theory of planned behavior. The theory of planned behavior represent the link between beliefs and behavior such as self-confidence, perseverance, energy, optimism, flexibility, creativity, initiative, ability to treat people, versatility, product and market knowledge, and technology [7].

B. Motivation and Entrepreneurship

Motivation could be from internal and external factor or pull and push factor of individual, Gilad and Levine (1986) proposed two suggestion that closely-related to the entrepreneurial motivation of the push theory and the pull theory. The push theory explain that individuals are driven into entrepreneurship by several negative external forces, such as job dissatisfaction, difficulty finding job, inadequate salary, or inflexible work schedule. The pull theory argues that individuals are interested into entrepreneurial activities that seek independence, self-actualization, wealth, and other desirable outcomes. Research by Keeble et al., 1992; Orhan and Scott, 2001 conclude that individuals interested in becoming an entrepreneur primarily due to the pull factors, than the push factors [8].

C. Opportunity Identification

There are three different categories of opportunities 1) the creation or discovery of new information, as occurs with the advent of new technology, 2) the exploitation of market inefficiencies arising from asymmetric of information, as occurs over time and geography, and 3) the response to shifts in the relative costs and benefits of alternative resource uses, as in the case of social, political, regulatory, or demographic changes in society [9].

Opportunity can be defined as a favorable set of circumstances that creates a need for a new or modification of product, service, or business. An opportunity must has four essential qualities, it is attractive enough, timely, durable, and anchored in a product, service, or business that creates or adds value for their customer or end-user. There are three ways to identify the opportunities, 1) observing trends, 2) solving a problem, 3) Find a gap in the marketplace [4].

D. Resources capacity

Resources in this part can be defined as a tangible and intangible assets that company used to compete in market [10]. Another definition about resource also can describe as economic, physical, human and organizational capability that used by a company to develop, produce and supply its customers with products or services [11].

E. Entrepreneurial Capability

There are a lot of definition about entrepreneurial capability, such as ability to balancing the internal and external condition to explore and exploit the opportunity [12]. Other definition that closely-related with entrepreneurial capability is a depth of faith in one's ability to perform the entrepreneur's roles and tasks effectively [13].

F. Conceptual Framework

The conceptual framework of this research adopt the research that conduct by Alugbola in 2017 with us four variables such as motivation, opportunity identification, resources capacity, and entrepreneurial capability as present as follow

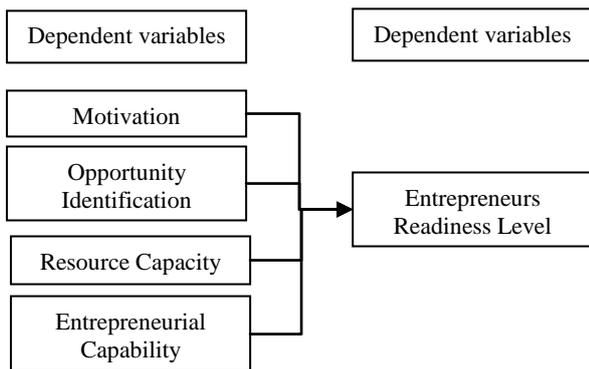


Fig 3. Conceptual Framework

Motivational variables are measured through several indicators namely, achievement motive, profit motivation, and desire for independence. The opportunity identification variable is measured through indicators of innovative ideas, creative ideas, social networking, and prior knowledge. Resource variables are measured through indicators of intellectual property, physical resources, and access to financial institutions. Last, entrepreneurial ability variables will be measured by management skills, financial skills, marketing skills, effective business plans, team building task, and administrative tasks.

III. RESEARCH METHODOLOGY

This research conduct with quantitative method by using the simple random sampling, where each member of the population has the same opportunity to become a member of the research sample [14]. From ministry of research technology and higher education showed that number of first year student of entrepreneurship study program in 2018 at West Java are 628 students, with confident level 95% we calculate the minimum number of sample size for this research is 239. Questionnaire design of this research conduct with structured questionnaire and collection period of the sample data taken from 7-28 January 2019.

To measure the dependent and independent variables, this research used a likert-scale (ranging from 1=strongly disagree to 5=strongly agree).

IV. RESULT AND DISCUSSION

A. Validity and Reliability Measurement

Based on the data that we collect from 7-28 January 2019, we get 370 respondents with distributed as given below.

Table- 1: Distribution of respondents

| Gender | Percentage |
|--------|------------|
| F | 46% |
| M | 54% |

To analyze and calculate the data from respondents, researchers using SPSS. Below is the result for the validity test of this research.

Table- 2. Validity test result

| | | Motivation | Opportunity | Resource | Entr_Skill | Entr_Rdn |
|-------------|---------------------|------------|-------------|----------|------------|----------|
| Motivation | Pearson Correlation | 1 | 0.93 | 0.91 | 0.94 | 0.91 |
| | Sig. (2-tailed) | | 0 | 0 | 0 | 0 |
| | N | 370 | 370 | 370 | 370 | 370 |
| Opportunity | Pearson Correlation | 0.93 | 1 | 0.92 | 0.94 | 0.89 |
| | Sig. (2-tailed) | 0 | | 0 | 0 | 0 |
| | N | 370 | 370 | 370 | 370 | 370 |
| Resource | Pearson Correlation | 0.91 | 0.92 | 1 | 0.93 | 0.89 |
| | Sig. (2-tailed) | 0 | 0 | | 0 | 0 |
| | N | 370 | 370 | 370 | 370 | 370 |
| Entr_Skill | Pearson Correlation | 0.94 | 0.94 | 0.93 | 1 | 0.91 |
| | Sig. (2-tailed) | 0 | 0 | 0 | | 0 |
| | N | 370 | 370 | 370 | 370 | 370 |
| Entr_Rdn | Pearson Correlation | 0.91 | 0.89 | 0.89 | 0.91 | 1 |
| | Sig. (2-tailed) | 0 | 0 | 0 | 0 | |
| | N | 370 | 370 | 370 | 370 | 370 |

Based on the table validity result, with 5% significance level showed that all variables value are above 0.85, then all variables in research are valid.

The calculation of reliability test showed below

Table- 3: Reliability test result

| | Cronbach's α | 95.0% Confidence Interval | |
|-------|---------------------|---------------------------|-------|
| | | Lower | Upper |
| scale | 0.879 | 0.859 | 0.898 |

Note. Of the observations, 370 were used, 0 were excluded listwise, and 370 were provided.

Based on calculation, score for reliability test is 0.879, with confident level 95%, the table score is 0.840, therefore the research instrument of all variables that include in this research are reliable.

B. Correlation Analysis

Table- 4: Model summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| 0.93 | 0.86 | 0.86 | 35.99 |

From the result showed that score of R Square is 0.86, it means that four independent variables can define 86% of the variance of dependent variable (entrepreneur readiness level) and 14% of the variance is explained by others variables outside the model.

Table- 5: Coefficients variables

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|-------------|-----------------------------|------------|---------------------------|------|-------|
| | B | Std. Error | Beta | t | Sig. |
| (Constant) | 18.2 | 5.34 | 0 | 3.41 | 0.001 |
| Motivation | 1.25 | 0.19 | 0.4 | 6.44 | 0.000 |
| Opportunity | 0.47 | 0.25 | 0.12 | 1.86 | 0.064 |
| Resource | 0.77 | 0.27 | 0.17 | 2.94 | 0.004 |
| Entr_Skill | 0.52 | 0.14 | 0.26 | 3.63 | 0.000 |

All variables in the research equation are significant with p value below 5%, except opportunity variable, with significant value above 5%. Based on the standardized value of calculation result that motivation variable is the highest with score 0.4 and $p < 0.005$, following by entrepreneurship skill (0.26, $p < 0.005$), resources (0.17, $p < 0.005$), and opportunity (0.12, $p > 0.005$).

C. Discussion

From the calculation showed that all variables are significant except opportunity identification variables. These research support the previous research that motivation, resource capacity, and entrepreneurship skill have significant and positive influence to entrepreneur readiness level [1], [7], [15]. According to this result we can be seen that the process of entrepreneurial in entrepreneurship study program in West Java already consider and prepare their students to become strong, persistent, and bold entrepreneurs with several tools, programs, and trainings. At the same time, students also already realized that there are a lot things to do and prepared if they want to become an entrepreneurs such motivation from himself / herself and also entrepreneurial skill such as decision making, managerial skill, teamwork, interpersonal skill, business management, and network building skill. Researchers found that many study program, government, and private sector support their student or participants with several entrepreneurship program such as business incubator, investor day, pitch day, innovation competition, business mentor, entrepreneurship seminar, entrepreneurship training, and financing program.

Opportunity identification variable in this research resulted not significant value, this findings occurs resulted because of the respondents data that researchers choose, Others research use the data from second year college student in Malaysia [1] and women entrepreneurs with several years business experience in Malaysia [15]. This findings is interesting to analyze, some arguments believe that opportunity identification closely-related with individual's experience, some research showed that there are two broad categories of factors influencing the probability that particular individuals would discover new opportunities: (1) the possession of prior information necessary to identify opportunities and (2) the cognitive traits needed to value them [16]. All humans being have different stocks of information, and this stock of information affect their ability to identify and recognize certain opportunities, the information stock creates a mental

cognitive scheme that provides a framework for recognizing new basis information, an entrepreneur must have prior information to identify the opportunities that complementary to new information that causes allegations of entrepreneurship [17].

The implication of this findings means that for both formal and informal educational institutions, it is compulsory and first priority to facilitate and train their students or participants with the knowledge and learning experience regarding to sensing the ideation and opportunity discovery then how to execute it. Institution also can facilitate student or participants with the basic foundation of knowledge and concept about bow to generating an ideas, critical thinking, and opportunity discovery such as provide material with design thinking approach, six thinking hats methods, creative thinking, business plan, business model, and idea generation techniques.

V. CONCLUSION

According to the this research, we can establish some conclusions and suggestion for future research, some variables such as motivation, resources capacity, and entrepreneurial skills have significant value with the highest value came from motivation and entrepreneurial capabilities. Variable opportunity identification resulted not significant value in this research, however, some research showed that opportunity identification is important things to consider if students want to create a business, argument for these condition because of the respondents of research are the first-year college students where they had just graduated from high school.

There are several implication based on this research for formal, informal institution, government, and private sector. Institutions have to develop the basic foundation, concept, and knowledge about critical thinking of how to generating an ideas and discover opportunity in entrepreneurship process, because many research suggest that opportunity identification variable is important for person who want to become an entrepreneurs. Respondents in this research also already realized that they have to prepared themselves with highly inner-motivation and develop the entrepreneurial skills.

Future research suggest to explore about the opportunity identification that influence the entrepreneurship field to improve the entrepreneurial process in the future.

REFERENCES

1. Seun Azeez Olugbola, "Exploring Entrepreneurial Readiness of Youth and Start-up Success Components: Entrepreneurship Training as a Moderator," *Journal of Innovation and Knowledge*, 2(3), 2017, pp 155-171
2. Alicia Coduras, Saiz-Alvarezb, José Manuel, Jesús Ruiz, "Measuring Readiness for Entrepreneurship: An Information Tool Proposal," *Journal of Innovation & Knowledge*, 1, 2016, pp 99-108
3. Donald F. Kuratko and Richard M. Hodgetts, "Entrepreneurship: Theory, Process, Practice," Thomson South Western, 06, 2004
4. B. R. Barringer and R. D. Ireland, "Entrepreneurship: Successfully Launching New Ventures," 05, Pearson Education, 2016

5. Neil Bosma & Donna Kelly, "Global Entrepreneurship Monitor, 2018/2019 Global Report", Global Entrepreneurship Research Association, 2019, pp. 20
6. A. A. Gibb & J. Ritchie, "Understanding the Process of Starting Small Businesses," European Small Business Journal, 1(1), 1982, pp 26-45
7. Jesús Ruiz, Domingo R. Soriano, & Alicia Coduras, "Challenges in measuring readiness for entrepreneurship," Management Decision, 54 (5), 2016, pp. 1022-1046
8. Gerry Segal, Dan Borgia, & Jerry Schoenfeld, "The Motivation To Become an Entrepreneur," International Journal of Entrepreneurial Behaviour & Research, 11(1), 2005, pp. 42-57
9. Peter Drucker, "Innovation and Entrepreneurship: Practice and Principles", Harper & Row, 1985.
10. Sharon A. Alvarez & Jay B. Barney, "Entrepreneurial Resources," Wiley encyclopedia of management. John Wiley & Sons, Ltd. 2015
11. Jay B. Barney, "Looking inside for competitive advantage," Academy of Management Perspective, 9(4), 1995, pp. 49-61
12. Shaker A. Zahra, "Entrepreneurial Capability: Opportunity Pursuit and Game Changing," Paper to be presented at the DRUID 2011 on innovation, strategy, and structure – Organizations, institutions, systems, and regions at Copenhagen Business School, 2011
13. Chao C. Chen, Patricia G. Greene, & Ann Crick, "Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?" Journal of business venturing, 13(4), 1998, pp. 295-316
14. Uma Sekaran & Roger Bougie, "Research Methods for Business: A Skill Building Approach," 06, John Wiley & Sons Ltd, 2013
15. Muhamad Nasharudin, Nurfazreen Aina., Redzuan, Ma'rof., and Abdul Rahman, Abdul Razak. "Factors contributing to individual capacity building levels among women entrepreneurs," Pertanika journal of social sciences & humanities, 21 (2), 2013, pp. 435-448
16. Scott Shane & Sankaran Venkataraman, "The distinctive domain of entrepreneurship research," Seminal Ideas for the Next Twenty-Five Years of Advances, 21, Emerald publishing limited, 2019, pp. 5-20
17. Stanley Kaish & Benjamin Gilad, "Characteristic of opportunities search of entrepreneurs versus executives: sources, interests, general alertness," Journal of business venturing, 6 (1), 1991, pp. 45-61

AUTHORS PROFILE



Iston Dwija Utama, graduated from master in business management program, passionate in entrepreneurship, marketing, and management field. Experienced in industry for more than 8 years and having own business in culinary. Beside teaching, he is also active in professional organization that concern in SMEs namely LUNAS (Layanan UMKM Naik Kelas) as a business mentor.



Dian Kurnianinrum, graduated from magister management program with concentration in finance field. Experienced in finance management as a banker for six years then concentration in education area as a finance and business lecturer at BINUS University. She also part of professional lecturer organization namely Ikatan Dosen Republik Indonesia.



Ivan Diryana, graduated from doctoral of business management, he has an experience in industry for 2 years then focusing in education field as a lecturer. He also have a business in culinary area for more than eight years. Interest area of research and lecturing in entrepreneurship, marketing, business, and management



Dr. Mulyani, graduated from Doctoral of economic program. Mulyani have a passion in research about art and humanity, management and leadership. She is a lecturer of Entrepreneurship program of BINUS University. Her concern about teaching and research made her become part of lecturer association namely Ikatan Dosen Republik Indonesia.